List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 11 (Cancelled).

12.   (New) A method providing protection from unauthorized access to a field device connected over a data bus with a control unit, comprising the steps of:
storing in the field device a security program, which performs an authorization examination in the case of an accessing of the field device over the data bus.

13. (New) The method as claimed in claim 12, wherein:
the security program is part of a function block.

14.   (New) The method as claimed in claim 12, wherein:
the security program is part of firmware stored in the field device.

15. (New) The method as claimed in claim 12, wherein:
the security program includes a security key, which is stored in the field device during configuration of the field device.

16. (New) The method as claimed in claim 12, wherein:
the security key is an at least 128-bit code.

17.   (New) The method as claimed in claim 12, wherein:
the security key is created during installation of the field device.

18.   (New) The method as claimed in claim 12, wherein:
the security key is provided by the field device.

19. (New) The method as claimed in claim 12, wherein:
the security key is regularly renewed.

20. (New) The method as claimed in claim 12, wherein:
the security key is renewed hourly.

21. (New) The method as claimed in claim 12, wherein:
the security key is stored only in the field device.

22. (New) The method as claimed in claim 12, wherein:
the field devices are sensors, actuators, controllers, PLCs or gateways.